



FORM PTO-1449

U.S. DEPARTMENT OF COMMERCE  
PATENT & TRADEMARK OFFICE

ATTY DOCKET NO.

ALLIA.62F1C2C1

APPLICATION NO.

10/029,712

**RECEIVED**INFORMATION DISCLOSURE STATEMENT BY  
APPLICANT

(USE SEVERAL SHEETS IF NECESSARY)

APPLICANT

Schutt et al.

DEC 27 2002

FILING DATE  
December 19, 2001

GROUP

1619

TECH CENTER 1600/2900

1613

										U.S. PATENT DOCUMENTS			
EXAMINER INITIAL	D N	O U	C M	U B	M E	E R	N	T	DATE	NAME	CLASS	SUBCLASS	FILING DATE
4	2	7	6	8	8	5			07/07/81	Tickner, et al.	128	660	
4	4	6	6	4	4	2			08/21/84	Hilman, et al.	128	653	
4	6	1	3	3	2	6			09/23/86	Szwarc	604	89	
4	6	8	4	4	7	9			08/04/87	D'Arrigo	252	307	
4	7	1	8	4	3	3			01/12/88	Feinstein	128	660	
4	7	7	4	9	5	8			10/04/88	Feinstein	128	660.01	
4	8	3	2	9	4	1			05/23/89	Berwing, et al.	424	9	
4	8	4	4	8	8	2			07/04/89	Widder, et al.	424	9	
4	8	9	8	7	3	4			02/06/90	Mathiowitz, et al.	424	426	
4	9	2	7	6	2	3			05/22/90	Long, Jr.	424	5	

										FOREIGN PATENT DOCUMENTS			
EXAMINER INITIAL	D N	O U	C M	U B	M E	E R	N	T	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
5	9	6	7	2	2	9			04/84	Japan			
0	2	3	0	0	9	1			08/87	Europe			
0	2	7	9	3	7	9			08/88	Europe			
0	3	5	7	1	6	4			03/90	Europe (in Germany with Summary in English)			
0	3	5	9	2	4	6			03/90	Europe			
9	1	0	9	6	2	9			07/91	Patent Cooperation Treaty			

EXAMINER INITIAL		OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)											
1		Acoustic Non-Linearity Due to Micro-Bubbles in Water Wesley & Safar, <i>Acustica</i> , 22: 177-182, 1969-70.											
2		Ultra sonic Disruption Alliger, Reprinted from <i>American Laboratory</i> , Oct. 1975.											
3		Demonstration of Nonlinear Acoustical Effects at Biomedical Frequencies and Intensities. Carstensen, et al., <i>Ultrasound in Medicine &amp; Biology</i> , 6: 159-168, 1980.											
4		Textbook of Diagnostic Ultrasonography, Second Edition, by Sandra Hagen-Ansert, pp. 10-12, 1983.											

EXAMINER

Hartley

DATE CONSIDERED

8/19/2003

\*EXAMINER: INITIAL IF CITATION CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP 609; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED. INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.

FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE PATENT & TRADEMARK OFFICE	ATTY DOCKET NO.  ALLIA.62F1C2C1	APPLICATION NO.  10/029,712
INFORMATION DISCLOSURE STATEMENT BY APPLICANT  (USE SEVERAL SHEETS IF NECESSARY)	APPLICANT  Schutt et al.	
	FILING DATE December 19, 2001	GROUP 1619

										U.S. PATENT DOCUMENTS		
EXAMINER INITIAL	D N	O U	C M	U B	M E	E R	N T	DATE	NAME	CLASS	SUBCLASS	FILING DATE
4	9	5	7	6	5	6		09/18/90	Cerny, et al.	252	311	
5	0	8	8	4	9	9		02/18/92	Unger	128	667.02	
5	1	2	3	4	1	4		06/23/92	Unger	128	654	
5	1	4	1	7	3	8		08/25/92	Rasor, et al.	424	2	
5	1	4	9	3	1	9		09/22/92	Unger	604	22	
5	1	5	5	2	1	5		10/13/92	Ranney	534	16	
5	1	9	6	1	8	3		03/23/93	Yudelson, et al.	424	9	
5	2	0	5	2	8	7		04/27/93	Erbel, et al.	128	632	
5	2	0	5	2	9	0		04/27/93	Unger	128	653.4	
5	2	7	1	9	2	8		12/21/93	Schneider, et al.	424	9	

										FOREIGN PATENT DOCUMENTS		
EXAMINER INITIAL	D N	O U	C M	U B	M E	E R	N T	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
9	1	1	2	8	2	3		09/91	Patent Cooperation Treaty			
9	1	1	5	9	9	9		10/91	Patent Cooperation Treaty			
9	2	2	2	2	4	7		12/92	Patent Cooperation Treaty			
9	3	0	0	9	3	0		01/93	Patent Cooperation Treaty			
9	3	0	1	7	1	2		02/93	Patent Cooperation Treaty			
9	3	0	3	6	7	1		03/93	Patent Cooperation Treaty			

EXAMINER INITIAL		OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)										
5		Application of ultrasonic processors, Berliner, III, <i>Biotechnology Laboratory</i> , 46-52, Mar. 1984.										
6		Ultrasound Enhancement of Tissues During the Capillary Phase of PFOB-100% Immediately Post Infusion, Mattrey, M.D., "Abstract, Association of University Radiologists" 35 <sup>th</sup> Annual Meeting, Mar. 22-27, 1987.										
7		Perflurochemicals as US Contrast Agents for Tumor Imaging and Hepatosplenography: Preliminary Clinical Results. Mattrey, M.D., <i>Radiology</i> , 163: 339-343, 1987.										
8		Perflurooctylbromide: A New Contrast Agent for CT, Sonography, and MR Imaging, Mattrey, M.D., Manuscript 1988.										

EXAMINER <i>Harley</i>	DATE CONSIDERED <i>8/19/2003</i>
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	FILING DATE December 19, 2001	GROUP <u>1610 1606</u>



										U.S. PATENT DOCUMENTS			
EXAMINER INITIAL	D N	O U	C M	U B	M E	E R	N	T	DATE	NAME	CLASS	SUBCLASS	FILING DATE
<u>JP</u>	5	3	1	5	9	9	7		05/31/94	Widder, et al.	128	653.3	
<u>JP</u>	5	3	3	3	6	1	3		08/02/94	Tickner, et al.	128	662.02	
<u>JP</u>	5	3	3	4	3	8	1		08/02/94	Unger	424	9	
<u>JP</u>	5	3	4	8	0	1	6		09/20/94	Unger, et al.	128	662.02	
<u>JP</u>	5	3	5	2	4	3	5		10/04/94	Unger	424	9	
<u>JP</u>	5	3	5	2	4	3	6		10/04/94	Wheatley, et al.	424	9	
<u>JP</u>	5	1	9	5	5	2	0		05/23/93	Schlieff, et al.	128	660.01	
<u>JP</u>	5	5	8	5	1	1	2		12/17/96	Unger, et al.	424	450	
<u>JP</u>	5	5	3	6	4	8	9		07/18/96	Lohrmann, et al.	424	9.52	
<u>JP</u>	4	5	7	2	2	0	3		02/25/86	Feinstein	128	661	

										FOREIGN PATENT DOCUMENTS			
EXAMINER INITIAL	D N	O U	C M	U B	M E	E R	N	T	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
<u>JP</u>	0	5	5	4	2	1	3		08/93	Europe			
<u>JP</u>	9	3	2	5	2	4	2		12/93	Patent Cooperation Treaty (Abstract & Claims)			
<u>JP</u>	0	4	5	8	7	4	5		09/94	Europe			
<u>JP</u>	9	4	2	1	1	7	5		09/94	Patent Cooperation Treaty			
<u>JP</u>	9	0	0	1	9	5	2		03/90	WO			
<u>JP</u>	W	O	89	0	6	9	7	8	08/25/89	Australia			

EXAMINER INITIAL		OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)											
<u>JP</u>	9	Absorption and scatter of encapsulated gas filled microspheres: theoretical considerations and some measurements, de Jong, et al., <i>Ultrasonics</i> , 30: No. 3, 95-103, 1992.											
<u>JP</u>	10	Simulated Capillary Blood Flow Measurement Using a Nonlinear Ultrasonic Contrast Agent, Schroepe, et al., <i>Ultrasonic Imaging</i> , 14: 134-158, 1992.											
<u>JP</u>	11	<del>Liposomes. From Biophysics to Therapeutics. Edited by Mark J. Ostro, Marcel Dukker, Inc., New York, pp. 2-8, 17-21, 74 and 105</del>											
<u>JP</u>	12	<del>Foundation of Colloid Science, Volume 1, Hunter, et al., Clarendon Press, Oxford, pp. 20 &amp; 22.</del>											

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APPLICANT

Schutt et al.

FILING DATE  
December 19, 2001

GROUP

1619 1616

										U.S. PATENT DOCUMENTS			
EXAMINER INITIAL	D N	O U	C M	U B	M E	E R	N	T	DATE	NAME	CLASS	SUBCLASS	FILING DATE
5	4	1	0	5	1	6			04/25/95	Uhlendorf, et al.	367	7	
4	6	5	8	8	5	6			04/14/87	Rasor, et al.	424	9	
4	9	0	4	4	7	9			02/27/90	Illum	424	490	
4	9	2	5	6	7	8			05/15/90	Ranney	424	493	
5	1	0	8	7	5	9			04/28/92	Ranney	424	493	
5	1	8	6	9	2	2			02/16/93	Shell, et al.	128	654	
5	1	9	0	9	8	2			03/02/93	Erbel, et al.	521	56	
5	3	0	5	7	5	7			04/26/94	Unger, et al.	128	662.02	
5	3	1	0	5	4	0			05/10/94	Giddey, et al.	424	9	
5	3	1	5	9	9	8			05/31/94	Tachibana, et al.	128	660.01	

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EXAMINER INITIAL	D N	O U	C M	U B	M E	E R	N	T	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
W	O	92	2	2	2	4	9		12/23/92	PCT			
W	O	94	1	6	7	3	9		08/04/94	PCT			
W	O	95	1	6	4	6	7		06/22/95	PCT			
1	2	3	2	3	5	B1			10/31/84	EPO			
1	3	1	5	4	0	A2			01/16/85	EPO (Abstract and translation of Claims)			Yes Claims
2	3	1	0	9	1	A1			08/05/87	EPO			

EXAMINER INITIAL	OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)												
13	Peripheral Vascular Doppler Examinations, Rac, H, <i>Textbook of Diagnostic Ultrasonography</i> , pp. 323-325.												
14	"Principles and Recent Developments in Ultrasound Contrast Agents," N. de Jong, et al., <i>Ultrasonics</i> , 29:324-330, 1991.												
15	"First Ultrasound Contrast Agent Awaits OK from FDA," Greer, <i>Advance for Radiologic Science Professionals</i> , pp. 3-5, 1993.												
16	Kitagawa, et al. <i>Biological Abstracts</i> 63:6392 (1977).												

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APPLICANT Schutt et al.		FILING DATE December 19, 2001
		GROUP 1619 1665

										U.S. PATENT DOCUMENTS			
EXAMINER INITIAL	D N	O U	C M	U B	M E	E R	N	T	DATE	NAME	CLASS	SUBCLASS	FILING DATE
JS	5	3	7	6	3	8	0		12/27/94	Kikuchi, et al.	424	450	
JS	5	3	8	0	5	1	9		01/10/95	Schneider, et al.	424	9	
JS	5	3	9	3	5	2	4		02/28/95	Quay	424	9	
JS	5	4	0	9	6	8	8		04/25/95	Quay	424	9	
JS	5	4	1	3	7	7	4		05/05/95	Schneider, et al.	424	9.51	
JS	5	5	5	6	6	1	0		09/17/96	Yan, et al.	424	9.52	
JS	5	5	5	8	0	9	4		09/24/96	Quay	128	662.02	
JS	5	5	5	8	8	5	3		09/24/96	Quay	424	9.5	
JS	5	5	5	8	8	5	4		09/24/96	Quay	424	9.52	
JS	5	5	5	8	8	5	5		09/24/96	Quay	424	9.5	

										FOREIGN PATENT DOCUMENTS			
EXAMINER INITIAL	D N	O U	C M	U B	M E	E R	N	T	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
JS	5	8	6	8	7	5	A1		02/01/89	EPO			No
JS	3	2	0	4	3	3	A3		06/14/89	EPO (Abstract and translation of claims)			Yes Claims
JS	8	9	0	5	1	6	0		06/15/89	PCT			Yes Abstract
JS	3	0	3	5	1	8	9		08/25/89	Australia			
JS	9	3	0	0	9	3	0		01/21/93	PCT			
JS	9	3	0	2	7	1	2		02/18/93	PCT			

EXAMINER INITIAL		OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)											
JS	17	Keough, et al. <i>Biological Abstracts</i> 81:105308 (1986)											
JS	18	Matsuda, et al. "Contrast Echocardiography of the Left Heart by Intravenous Injection of Perfluorochemical Emulsion" <i>J. of Cardiography</i> 13(4):1021-1028 (1983).											
JS	19	Sunamoto, et al. "Liposomal Membranes" <i>J. Biochem.</i> 88:1219-1226 (1980).											
JS	20	Mattrey, R.F., M.D., "Perfluorooctylbromide: A Liver/Spleen-Specific and Tumor-Imaging Ultrasound Contrast Material" <i>Radiology</i> 145(3):759-762 (1982).											

EXAMINER <i>Harvey</i>	DATE CONSIDERED <i>8/19/2003</i>
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		FILING DATE December 19, 2001	GROUP 1615 1666

										U.S. PATENT DOCUMENTS			
EXAMINER INITIAL	D N	O U	C M	U B	M E	E R	N	T	DATE	NAME	CLASS	SUBCLASS	FILING DATE
AS	5	5	5	8	8	5	6		09/24/96	Klaveness, et al.	424	9.37	
AS	5	5	5	8	8	5	7		09/24/96	Klaveness, et al.	424	9.52	
BS	5	4	6	9	8	5	4		11/28/95	Unger et al.			6/11/93
BS	5	5	4	2	9	3	5		8/6/96	Unger et al.			11/30/93
BS	5	7	0	5	1	8	7		1/6/98	Unger	424	450	4/5/95

										FOREIGN PATENT DOCUMENTS			
EXAMINER INITIAL	D N	O U	C M	U B	M E	E R	N	T	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
AS	9	3	0	5	8	1	9		04/01/93	PCT			
AS	9	3	0	6	8	6	9		04/15/93	PCT			
BS	9	4	0	1	1	4	0		01/20/94	PCT (Abstract and translation of Claims)			Yes Claims
BS	9	4	0	6	4	7	7		03/31/94	PCT			
BS	9	4	0	8	7	0	7		04/28/94	PCT			
BS	9	4	0	9	7	0	3		05/11/94	PCT			

EXAMINER INITIAL	OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)												
AS	21	Goldberg et al., <i>Ultrasound in Med. &amp; Biol.</i> 20: 319-333 (1994)											
AS	22	Schrope and Newhouse, <i>Ultrasound in Med. &amp; Biol.</i> 19:567-579 (1993)											
BS	23	Mattrey, <i>Art. Cells, Blood Subs., and Immob. Biotech.</i> 22:295-313 (1994)											
BS	24	Peter N. Burns, <i>Radiologica Medica</i> 87: 71-82 (Suppl.1 al. n. 5, 1994)											

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EXAMINER INITIAL	D N	O U	C M	U B	M E	E R	N	T	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO	
H	9	4	0	9	8	2	9		05/11/94	PCT				
B	6	0	6	6	1	3	A1		07/20/94	EPO			RECEIVED	
B	9	4	1	6	7	3	8		08/04/94	PCT			DEC 27 2002	
B	9	4	2	8	7	9	7		12/22/94	PCT				
B	9	4	2	8	9	3	9		12/22/94	PCT			TECH CENTER 1600/2900	
B	A1	0	6	3	3	0	3	0	07/04/94	EPO				
B	9	2	1	1	8	7	3		07/23/92	WO				
B	6	5	2	8	0	3	B		09/08/94	Australia				
B	9	6	2	8	0	9	0		09/16/96	WO				
B	2	0	7	7	3	8	3		09/02/92	Canada	A61K	049		

EXAMINER INITIAL		OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)																
H	25	Barber, et al., "The Liquid-Vapor Equilibrium of the System Tungsten Hexafluoride-Perfluoro-n-Pentane," <i>The Journal of the American Chemical Society</i> , 73: 4247-4250, 1951.																
B	26	Blackburn, et al., "The Vaporization of Molybdenum and Tungsten Oxides," <i>The Journal of Physical Chemistry</i> , 62: 959-962, 1958.																
B	27	Dunlap, et al., "Some Physical Properties of Perfluoro-n-hexane," <i>The Journal of the American Chemical Society</i> , 80: 83-85, 1958.																
B	28	Douslin, et al., "The Pressure-Volume-Temperature Properties Of Perfluorocyclobutane: Equations of State, Virial Coefficients and Intermolecular Potential Energy Functions," <i>The Journal of Physical Chemistry</i> , 63: 1959-1966, 1959.																
B	29	<i>Flourine Chemistry</i> , Volume V, Ed. by J.H. Simons, pp. 133-229, 1964.																
B	30	Penner, et al., "Quantitative Infrared Intensity Measurements. I. Carbon Monoxide Pressurized with Infrared-Inactive Gases," <i>The Journal of Chemical Physics</i> , 19: 845-848, 1951.																
B	31	<i>Physical Chemistry</i> , Second Edition, by P.W. Atkins, pp. 28-51, 1982.																
B	32	<i>Physical Chemistry</i> , Third Edition, by P.W. Atkins, p. 29, 814, 1986.																

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